

0590

1107

#3

OIPE

RAW SEQUENCE LISTING

DATE: 10/24/2001

PATENT APPLICATION: US/09/680,959

TIME: 14:47:19

Input Set : A:\LEX-0051-USA SEQLIST.TXT

Output Set: N:\CRF3\10242001\I680959.raw

4 <110> APPLICANT: Friedrich, Glenn
5 Zambrowicz, Brian
6 Sands, Arthur T.
8 <120> TITLE OF INVENTION: Novel Mutated Mammalian Cells and
9 Animals
11 <130> FILE REFERENCE: LEX-0051-USA
C--> 13 <140> CURRENT APPLICATION NUMBER: US/09/680,959
C--> 13 <141> CURRENT FILING DATE: 2000-10-04
13 <150> PRIOR APPLICATION NUMBER: US 60/157,651
14 <151> PRIOR FILING DATE: 1999-10-04
16 <160> NUMBER OF SEQ ID NOS: 574
18 <170> SOFTWARE: FastSEQ for Windows Version 4.0
20 <210> SEQ ID NO: 1
21 <211> LENGTH: 442
22 <212> TYPE: DNA
23 <213> ORGANISM: Mus musculus
25 <220> FEATURE:
26 <221> NAME/KEY: misc_feature
27 <222> LOCATION: (1)...(442)
28 <223> OTHER INFORMATION: n = A,T,C or G
30 <400> SEQUENCE: 1
31 aggcagccat cttctcctcc ctgcgacatc ttttccatcc agatgcaagt cgtgggagct 60
W--> 32 ganagctcgg acnagggtga gattgccgcc ttccctcga cccgaacgcg tgcgccccgc 120
W--> 33 cggccccccg ctgggtgcac actgcacgc acaccctgc acccataccc gcacacncgg 180
W--> 34 gagcacacgc acaggtantc agtcacacac caagggcagc agcgacggcg gacnaaacat 240
W--> 35 gctccggtgg cattgcaacc cccccaccc cgccatccaa ccttgcaatt cntttgcagt 300
W--> 36 cagaccccaa accccacacc ttccccggag cccccctcca taaaaaantg ccttcccccc 360
W--> 37 aaaacacacn cgcacacntn acncaaant ngganaatgg accgacagaa aatntttttg 420
38 gcaaatgctc catcaaaagg gc 442
40 <210> SEQ ID NO: 2
41 <211> LENGTH: 238
42 <212> TYPE: DNA
43 <213> ORGANISM: Mus musculus
45 <400> SEQUENCE: 2
46 gcttttagcc aaaaaatcaa tgaaccagta agttgcattc gaaacggagg catatgccag 60
47 tateggtgca ttggccttag gcataagatt ggaacttggt gatctcctt caaatgctgc 120
48 aagtgataat agagaagaca aagatcctgc aaaccaaaga aaacaccaga attttttcct 180
49 ccatgaagat ggacaaaact taaaccaa taaagtttct tgattaaatg caaacact 238
51 <210> SEQ ID NO: 3
52 <211> LENGTH: 310
53 <212> TYPE: DNA
54 <213> ORGANISM: Mus musculus
56 <220> FEATURE:
57 <221> NAME/KEY: misc_feature
58 <222> LOCATION: (1)...(310)
59 <223> OTHER INFORMATION: n = A,T,C or G
61 <400> SEQUENCE: 3

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W--> 62 atgggtctca cggccaagga nctgggaggc ctccgatgac tcttcagcaa ggtgtacaaa      60
W--> 63 gccaaagtacc cattgttggc tacacagccc gaangatcct caacgaggat ggcagcccca      120
64 acctggactt caagcctgaa gaccagcccc attttgacat aaaggacgaa ttctgatgtc      180
65 tagctgagaa gcagccggtt ctagggagaa gtgaggggac aggagttaag tgtccctcgg      240
66 aacaagcgga ggaagcctcc gagtgccctg cagctgaata aagcgaatgt ttaactggga      300
67 aaaaaaaaaa                                     310
69 <210> SEQ ID NO: 4
70 <211> LENGTH: 468
71 <212> TYPE: DNA
72 <213> ORGANISM: Mus musculus
74 <400> SEQUENCE: 4
75 ggaattcgat atcaagctta ccatgaacga gtacaagccc acggtgcgcc tcgccacccg      60
76 cgacgacgtc cccagggggc gtacgcaccc tcgccgcgcg gttegcgcac tacccegccca      120
77 cgcgccacac cgtcgatccg gaccgccaca tcgagcgggt caccgagctg ctgatgcaga      180
78 gaattgagca gctttaaatt tagatttcaa tatttgagag aaatcagtaa atgttcatac      240
79 tcgttaacta tgtcaaactt tttattttat aaaatatagt ctgctaatat gtatattggc      300
80 ataagaattc ccaacagcat tttatgactc cttgggttta aaacctcagt attaaattta      360
81 tcagtgtttg tgggtgcagca catttaagtt caacatagtc cacacatttt gttggaagaa      420
82 gttttcaaat aaaaagcgcg agttggattt ttccatttaa aaaaaaaa      468
84 <210> SEQ ID NO: 5
85 <211> LENGTH: 283
86 <212> TYPE: DNA
87 <213> ORGANISM: Mus musculus
89 <400> SEQUENCE: 5
90 agaccagaca gtctggagta ttatcttgaa gtaatacatt gcccgaaaca tgtgcaagaa      60
91 gattgcagga gataatgaaa actgcttggt tcaacaggat cctaaaatga aaaagatggg      120
92 gttttgcatt tttattgtta gtcocaaacc atggaagttt gaacttaaaa tgctgaagaa      180
93 gcaatgcaaa gatatcta atcagcattcgg gacacottgc cactcttact tttcttttaa      240
94 ctgaataaag atgcttgtaa gatagtggac caccacaaaa aaa                                     283
96 <210> SEQ ID NO: 6
97 <211> LENGTH: 252
98 <212> TYPE: DNA
99 <213> ORGANISM: Mus musculus
101 <220> FEATURE:
102 <221> NAME/KEY: misc_feature
103 <222> LOCATION: (1)...(252)
104 <223> OTHER INFORMATION: n = A,T,C or G W
106 <400> SEQUENCE: 6
W--> 107 cttcactttc agctgctgcc ggetgccacc cttgcaccag ctnaaccanc agngcctgct      60
W--> 108 ggagtaagta ctantctgan ntntgccgca tgcntntgnc taccacatg gccatcnngg      120
W--> 109 tctcnatgct gctntccagg acanacgcn anagnagn agctttggaa tccaccctt      180
W--> 110 ctgtggggga aaactacntt caccaggant accatggctt tnccagtncc agtanaatgg      240
111 tggacattgg.cg                                     252
113 <210> SEQ ID NO: 7
114 <211> LENGTH: 318
115 <212> TYPE: DNA
116 <213> ORGANISM: Mus musculus
118 <400> SEQUENCE: 7
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120 cctgagggcc agatcaaaga agaatatcat caaggaagga tatgactctt cttcaatgag      120
121 ataggtacta acagtccagt acaatagcaa acaccaacca tgaatcagta gcagtggcaa      180
122 gatccagcag aaacagcaag actocatcga atcggcacaa gtcaacggaa gacgccagaa      240
123 tcagctggaa tatcataagt tctctggcac atttctctct gtgaagtgaa gaccaataaa      300
124 aagatcagtg aagaccgg                                     318
126 <210> SEQ ID NO: 8
127 <211> LENGTH: 411
128 <212> TYPE: DNA
129 <213> ORGANISM: Mus musculus
131 <220> FEATURE:
132 <221> NAME/KEY: misc_feature
133 <222> LOCATION: (1)...(411)
134 <223> OTHER INFORMATION: n = A,T,C or G
136 <400> SEQUENCE: 8
137 agctgattta tccagagccc agcatgggtt tctgactgc cgtgactcaa ggcttgggtgc      60
138 ggggagctga caggatgagc aagtggacaa gcaagcgggg accacgcacc ttcactaaga      120
139 gtcgggggtgc caagaaaaca ggcattctata cttctgatag gaagtttgtg caaataaaag      180
140 aaatgggttcc agaatttgtc gtcccggaact tgacgggctt caagctcaag ccctacgtta      240
141 attaccgagc tcttcgaggc atagacacac ctctgaccgc caaagcgctc ttccaggaaa      300
142 cagttgcacc cgctatcgaa aaagacttta aagaagggac atttgatgct aacaacctgg      360
W--> 143 agaaatccgg tttnaancca cacaggaagg caagctggtc caatatatcc t      411
145 <210> SEQ ID NO: 9
146 <211> LENGTH: 579
147 <212> TYPE: DNA
148 <213> ORGANISM: Mus musculus
150 <220> FEATURE:
151 <221> NAME/KEY: misc_feature
152 <222> LOCATION: (1)...(579)
153 <223> OTHER INFORMATION: n = A,T,C or G
155 <400> SEQUENCE: 9
156 gactgcattt acccatatgg cagccctgtt cccaccaccg cctgggtccca gatttgtcct      60
157 ccgaggcaca cagtgggttg tgaacacgct ccatttctgc ccaccatccc aagctgcagg      120
158 gaaccacttt ctcttctcag ggtctcagaa tggcctagta catatctgga gcctacaaac      180
159 aagaagaata gttaccactc taaatggcca tgggggccag ggtgtaatct ggctgaagac      240
W--> 160 actgccacag ggacaccagc tcttcaggca gggtcganac ctgcggctgt gcctgnnnga      300
W--> 161 cctggaggan ggcaggaaca ccatcatgga ctcanntnag ntggacagtg tgggcttatg      360
W--> 162 caggggctcc atcctggtea ggggacagca gtgctggatg cttgctgtgc canggaaggg      420
W--> 163 cagcgacgaa gtgccacctg cgttaganat gaanggcaa gaagctgagt gacctncaa      480
W--> 164 gaggaagact acttgntnca tggtctnagg ntggnctatc cnetgaancc tcagagnggc      540
W--> 165 atcttngtgt gtctgtggct tgggctgaac taataacca      579
167 <210> SEQ ID NO: 10
168 <211> LENGTH: 236
169 <212> TYPE: DNA
170 <213> ORGANISM: Mus musculus
172 <400> SEQUENCE: 10
173 cctgagagca ggttggttgc ctggatgccc agaatatcgt aagctgttgc gtgtggagaa      60
174 gctcacacgt tagcgtgtaa tgacaagggc caggtgtatg cttggggctc cgactctgac      120
175 ggacagcttg gcctacaggg atcagaggaa tgtatcagag taccaggtta acaaaggtga      180
176 ccgcacagag gtccttaagc ttctataata aatttatcta tctaaatcaa aaaaaa      236

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178 <210> SEQ ID NO: 11
179 <211> LENGTH: 375
180 <212> TYPE: DNA
181 <213> ORGANISM: Mus musculus
183 <220> FEATURE:
184 <221> NAME/KEY: misc_feature
185 <222> LOCATION: (1)...(375) OK
186 <223> OTHER INFORMATION: n = A,T,C or G
188 <400> SEQUENCE: 11
189 aactgagatg cctgccttcg atgtcaagct gaaaacaaag caagaggact gtgttggtgt      60
190 ctggggagag tgtaaccatt ccttcacaaa ctgctgcatg tccctgtggg tgaaacagaa      120
191 caatcgctgc cctctgtgcc agcaggactg ggtagtccaa agaatcggca aatgagaggt      180
192 ggcccaggcg ctctgtgtgt ggttgctgac cctggacaaa gactaaacac tgcaggggat      240
193 tcatccttga gagagagagg atgctgtgcg cctttgagac tcaccaaagg cttgctttat      300
W--> 194 taatttgtct gtttagtttt gggaaattct ctacaattaa aataatttgn taaaaatggc      360
195 ctttcctacc ttggg                                     375
197 <210> SEQ ID NO: 12
198 <211> LENGTH: 404
199 <212> TYPE: DNA
200 <213> ORGANISM: Mus musculus
202 <220> FEATURE:
203 <221> NAME/KEY: misc_feature
204 <222> LOCATION: (1)...(404) OK
205 <223> OTHER INFORMATION: n = A,T,C or G
207 <400> SEQUENCE: 12
W--> 208 actgagaaag gcccgtgaga gctgaactct gannactgaa gttctaagaa gccggaccga      60
W--> 209 tgtgcacaga gaaggaatga aggaagtatg gatgtgaagg aacgcangcc ttactgtccc      120
210 ttgaccaaga gcagacggga aaaggaaagg cgctatacaa actcgtccgc ggacaatgag      180
W--> 211 gagtgtaggg tccccacgca gaagtcctat agttccagng aaaccttgaa agctttcgat      240
W--> 212 catgattctt cacgntgct ttatggaaac agagtaaagg atttggtcca cagagaagcc      300
W--> 213 gacgagtata ctanacaagg acngaatttt accctaaggc agttaggagt gtgtgaatcc      360
W--> 214 gcaactcnaa gaggagtggc nttctgtgcg gaaatggggc ttcc                                     404
216 <210> SEQ ID NO: 13
217 <211> LENGTH: 314
218 <212> TYPE: DNA
219 <213> ORGANISM: Mus musculus
221 <220> FEATURE:
222 <221> NAME/KEY: misc_feature
223 <222> LOCATION: (1)...(314) OK
224 <223> OTHER INFORMATION: n = A,T,C or G
226 <400> SEQUENCE: 13
227 ctgaacgagt gacttcacta ggcaaggact ggcctcgtcc ctgcctgaag tgtgagaaat      60
228 gtggaaagac actgacctct gggggtcatg ctgagcatga aggcaagccc tactgcaatc      120
W--> 229 atccctgcta ctccgccatg tttgggcccc aaggctttgg gcgaggtgga gctganagcc      180
230 acactttcaa gtgaccgag gttgtgaaa ctctccctgc ccgccaggc acatgccagg      240
231 ccttaccctt ggacagcagg gctctcgga accctcagtg cctttaataa acctgatctt      300
232 tggaaaaaaa aaaa                                     314
234 <210> SEQ ID NO: 14
235 <211> LENGTH: 336

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236 <212> TYPE: DNA
237 <213> ORGANISM: Mus musculus
239 <220> FEATURE:
240 <221> NAME/KEY: misc_feature
241 <222> LOCATION: (1)...(336) OK
242 <223> OTHER INFORMATION: n = A,T,C or G
244 <400> SEQUENCE: 14
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246 atgccaaggg agaccgatg cttcggaatg ctcaaggcta aggcccaggc cctgggtgcag      120
247 tacctggagg aaccctcac ccaagtagca gcatcataac agcgtgagat gccaggactt      180
W--> 248 ggaaggtgcc attncnaggg tggncaacct tntgntatnt ntgtatgcca nggagaccgt      240
W--> 249 aagcttctaa tgctctnggc taacgcccac gccctggtgc antacctgga ggaaccctc      300
W--> 250 acccaagtag cancatcata acagcgtgag atgcca                                336
252 <210> SEQ ID NO: 15
253 <211> LENGTH: 280
254 <212> TYPE: DNA
255 <213> ORGANISM: Mus musculus
257 <220> FEATURE:
258 <221> NAME/KEY: misc_feature
259 <222> LOCATION: (1)...(280) OK
260 <223> OTHER INFORMATION: n = A,T,C or G
262 <400> SEQUENCE: 15
W--> 263 caccctctgg ccttgacaac cctgtcctgg ntctnacctn gcaatgntnn ngccctaaga      60
W--> 264 cgcttcacc tatggnccct ctttggnncc ggacgggaacn tggactaacc tggcccnnggt      120
W--> 265 gttcttncct ttttgaagan cttaaancct agganccctt ngtctgtcac accaggcctg      180
W--> 266 gggctggggg acagaaccgg agcacacacc ccctacanct gtcangnggg ggatggaacc      240
267 tggggacctt tccttttcca taccatgggg ccaggatatg                                280
269 <210> SEQ ID NO: 16
270 <211> LENGTH: 329
271 <212> TYPE: DNA
272 <213> ORGANISM: Mus musculus
274 <220> FEATURE:
275 <221> NAME/KEY: misc_feature
276 <222> LOCATION: (1)...(329) OK
277 <223> OTHER INFORMATION: n = A,T,C or G
279 <400> SEQUENCE: 16
W--> 280 actgagatgt ttcaaacctt ggttcaaaaa gtctgggtcc ccatgaaacc ctncataacc      60
W--> 281 caggtttacc aggaannntg ggnaggagtg gggttaatga gcctcatcgt atataaaatc      120
W--> 282 angagnctg ataaaagaag tnaagctttg aaaggctctg caccttgccc atggccatca      180
283 ctaactgctc cgaatccaca agatgaagac gtcggtctaaa cttgagcaag ctttgttaga      240
284 tgggaacatg gaacatcact gtacacttat ctaagtacca ttataatg tggcattaat      300
285 aaatgtatct gtgaatacca aaaaaaaaaa                                329
287 <210> SEQ ID NO: 17
288 <211> LENGTH: 374
289 <212> TYPE: DNA
290 <213> ORGANISM: Mus musculus
292 <220> FEATURE:
293 <221> NAME/KEY: misc_feature
294 <222> LOCATION: (1)...(374) OK

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Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

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VERIFICATION SUMMARY

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Input Set : A:\LEX-0051-USA SEQLIST.TXT

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L:13 M:270 C: Current Application Number differs, Replaced Current Application No
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:32 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:33 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:34 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:35 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:36 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:37 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:62 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:63 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:107 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:108 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:109 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:110 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:143 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:160 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:161 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:162 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:163 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:164 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:165 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:194 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:208 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:209 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:211 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:212 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:213 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:214 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:229 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:245 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14
L:248 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14
L:249 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14
L:250 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14
L:263 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:264 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:265 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:266 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:280 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16
L:281 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16
L:282 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16
L:302 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:303 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:321 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:322 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:323 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:336 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19
L:337 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19
L:355 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20

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L:373 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21
L:445 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26
L:461 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27
L:476 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28

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